Application No. 10/088,569 Response Date: December 18, 2006 Reply to Office Action: July 18, 2006

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## Amendments to the Claims:

- 1. to 11. (Cancelled)
- 12. (Currently amended) A method of using a [[gene]] nucleic acid encoding a serine-threonine kinase (STK) of a strain of Chlamydia and having SEQ ID NO: 1 to produce an immune response in a host, which comprises:

isolating said [[gene]] nucleic acid,

operatively linking said [[gene]] nucleic acid to a human cytomegalovirus major immediate-early promoter-enhancer region contained within plasmid pcDNA3 to produce a plasmid vector, said cytomegalovirus promoter directing expression of said STK when introduced to a host to produce an immune response to said STK, and

introducing said vector into a host intramuscularly or intranasally.

- 13. to 16. (Cancelled)
- 17. (Original) The method of claim 12 wherein said strain of Chlamydia is a strain producing chlamydial infections of the lung.
- 18. (Original) The method of claim 12 wherein said strain of Chlamydia is a strain of Chlamydia trachomatis.
- 19. to 20. (Cancelled)
- 21. (Original) The method of claim 12 wherein said host is a human host.
- 22. (Cancelled)
- 23. (Cancelled)